JCAP

E-Commerce
China

January 26, 2017
Company Update

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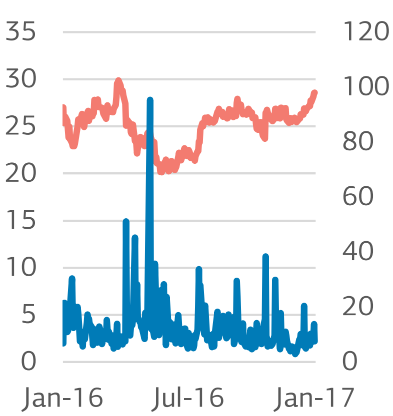
JD (JD US)

Price	USD 28.24
Market Cap	USD 39.08 bln
Rating	**SELL**
J Target Price	**USD 23**
Difference	-19%
P/E	N/A
TTM EPS	USD -2.81
S/I	44.6 mln shrs

JD (JD US) last share price in USD (pink, LHS) and volume (blue, in mln shares)



Source: Bloomberg January 25, 2017

JD (JD US)
Logistically Challenged

Logistics operations only losing more

JD's logistics business looks like it will only increase losses, as competition in delivery reaches a fever pitch. JD is still losing money after 13 years in business, and we see no profit in the company's future.

Uncompetitive in new categories

The push into higher-margin categories such as women's fashion is not helpful, since Alibaba is far stronger in this category.

A concerning need for cash

Deconsolidation of the finance unit creates concerns about how much debt is being raised. Meanwhile, the USD 1 bln in new debt suggests that JD is hard up for cash.

Sell rating

Given an unfavorable macro environment for e-commerce, we are re-opening coverage of JD with a SELL rating and a price target of USD 23 based on an estimate of 35% sales growth in 2016 and a 0.85x multiple of sales, similar to the peer group.

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Will We Ever See Profit? No.

JD has little hope of doing anything more than increasing its losses.

With its new third-party logistics offering opening up last November, JD has launched head to head into competition with some of the toughest players in the market: Shunfeng Express (SF), Zhongtong (listed as ZTO US), Yuantong (YTO), Shentong (STO), and Yunda (YD). JD gets credit for entering the scrum. But it has little hope of doing anything more than increasing its losses.

The highest-end competitor, SF Express, which has managed to capture the lucrative document-delivery trade, has low margins that were squeezed lower when SF dived into e-commerce deliveries in 2014. The other domestic players are franchise models whose cost structure is less visible, making SF a better comparable to JD.

According to SF's listing prospectus (the company ended up doing a reverse merger into Maanshan Rare Earth, listed as 002352 SZ, in 2016), declining margins in 2014 were mainly due to promotions around the expansion into e-commerce and a RMB 3.5 price drop per order, to RMB 12.48. That appears to be a subsidized price: SF's financial statements indicate a RMB 19.6 cost per order, while in 2015 SF charged an average RMB 14.59 per order in e-commerce.

Table 1. SF Price per Order (RMB)

	2013	2014	2015
Shunfeng standard	23.27	22.73	22.67
Shunfeng special	34.71	33.94	31.92
E-commerce	15.93	12.48	14.59
Fresh-products delivery	—	42.00	39.20
Delivery of crabs	—	36.79	34.66
General logistics	288.22	220.65	209.11
Other services	93.83	55.11	37.53

Source: Company data, J Capital

Is JD's declining fulfillment cost sustainable?

In 2015, SF's costs per order, RMB 19.6, were nearly twice those of JD. JD's reported fulfillment cost (JD reports cost rather than price charged to logistics clients) declined from RMB 13 per order in 2013 to RMB 11 per order in 2015.

Table 2. Revenue per Order (RMB)

	2013	2014	2015
ZTO (Zhongtong express)	N.A.	2.1	2.1
YTO (Yuantong express)	5.4	6.9	11.1
STO (Shentong express)	3.5	2.6	3.0
SF (Shunfeng express)	24.6	23.6	23.8
SF (cost per order)	18.6	20.0	19.6
JD	12.7	12.4	11.0

Source: Company data

Table 3. Number of Orders Fulfilled (mlns)

	2013	2014	2015
ZTO (Zhongtong express)	1,070	1,820	2,950
YTO (Yuantong express)	1,280	1,190	1,090
STO (Shentong express)	1,470	2,310	2,570
YD (Yunda express)	1,190	1,580	2,170
SF (Shunfeng express)	1,097	1,610	1,969
JD	323	652	1,263

Source: Company data, J Capital

Table 4. SF Order Breakdown

	2013	2014	2015
Shunfeng standard	93.8%	81.1%	75.7%
Shunfeng special	4.7%	7.7%	9.0%
E-commerce	0.5%	8.8%	10.6%
Fresh delivery	0.0%	0.1%	0.5%

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	2013	2014	2015
Crab delivery	0.0%	0.3%	0.4%
General logistics	0.0%	0.1%	0.3%
Other services	1.0%	1.8%	3.4%
Total	100.0%	100.0%	100.0%

Source: Company data, J Capital

Less pricing power

JD blames its losses on logistics and claims that margins will rise with volume. But look at SF, its best comparable: even with the highest pricing in the industry, SF seems to make very low margins.

Table 5. Shunfeng Express Margins

	2013	2014	2015
Gross margin	24.9%	17.3%	19.8%
OP margin	9.0%	1.6%	3.5%
Net margin	6.7%	1.2%	2.3%

Source: Company data

JD faces more, not less competition, and a price war seems inevitable.

The logistics market is seen as a magnet for capital, and new entrants are coming in all the time. The top five logistics players accounted for a 52% market share in 2015, and their share will only be eroded by all the new companies entering the fray. JD faces more, not less competition, and a price war seems inevitable.

Table 6. Market Share

	2011	2013	2014	2015
ZTO	7.6%	11.6%	13.0%	14.3%
YTO	15.3%	13.9%	8.5%	5.3%
STO	20.4%	16.0%	16.5%	12.4%
Yuanda	8.2%	13.0%	11.3%	10.5%
SF	16.9%	11.9%	11.5%	9.5%
Total	68.4%	66.5%	61.0%	52.0%

Source: Company data, J Capital

Losses to be expected

JD is known for the high quality of its delivery. By the end of Q3 2016, 85% of orders from JD's own inventory could be delivered nationwide by the second day after the order was placed. To achieve this, JD spent more than RMB 11 bln building the its logistic network between 2011 and 2015. JD's fulfillment cost is the lowest of e-commerce peers, including Dangdang (DANG US), VIPShop (VIPS US), and Amazon (AMZN US). But JD achieved this distinction by spending 24 times as much as Dangdang, twice as much as VIPS, and 1.4 as much as AMZN.

The cost of fulfillment as percentage of revenue has not shown a corresponding improvement. JD's fulfillment cost as a percentage of revenue is only slightly better than that of VIPS and Dangdang, despite JD's much greater scale—7.7% of revenue for JD versus 8% for DANG.

Table 7. Fulfillment Cost as % of Revenue

	2011	2012	2013	2014	2015
JD	7.2%	7.4%	5.9%	7.0%	7.7%
VIPS	20.0%	13.9%	11.7%	9.8%	9.1%
AMZN	8.7%	8.8%	8.7%	8.4%	8.7%
Dangdang	13.1%	14.2%	11.5%	9.7%	8.0%

Source: Company data, J Capital

In an interview on CCTV in November 2016, company founder Richard Liu stated that JD had made losses of over RMB 10 bln since 2007, when the

Table 8. Fulfillment Cost as % of Revenue

	2010	2011	2012	2013	2014	2015
Fulfillment	5.6%	7.2%	7.4%	5.9%	7.0%	7.7%
Marketing	2.3%	2.3%	2.7%	2.3%	3.5%	4.3%
Technology and content	0.5%	1.1%	1.5%	1.4%	1.6%	1.9%
General and administrative	1.2%	1.5%	1.5%	1.1%	4.6%	1.6%
Impairment of goodwill and intangible assets	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Total	9.7%	12.1%	13.1%	10.7%	16.7%	17.0%

Source: Company data

company started to build its own logistics network. JD's cost breakdown shows that fulfillment cost is the largest portion of operating expenses.

Our check of land records indicates total land value radically lower than JD claims.

Fishy capex

We suspect that JD is overstating its capital expenditure. JD in its 20-F claims it had acquired land-use rights in 12 cities in China by the end of 2015. But our check of land records from local governments and the financial filings of JD subsidiaries indicate total land value radically lower than JD claims: RMB 1.165 bln, or 58.6% of the total land-use right spending on cash flow statement from 2011 to 2015.

Table 9. JD Public Record Spending on Land Use Rights

Cities	Acquisition price (RMB mln expt %)
Beijing	295.0
Shanghai	33.6
Guangzhou	60.4
Wuhan	123.1
Nanjing	55.7
Shenyang	95.4
Kunshan	85.7
Guiyang	141.7
Suqian	15.9
Chongqing	97.1
Xi'an	106.6
Tianjin	55.7
Total	1,165.9
Total spending on land use rights (based on cash flow statement)	1,991.2
Recorded spending as % of CF spending	58.6%

Source: Local land bureaus and Soufun (land.fang.com)

Table 10. Capex: JD, VIPS, DANG, and AMZN (RMB mlns)

	2011	2012	2013	2014	2015	Total
JD	623	1,148	1,292	2,902	5,300	11,265
VIPS	62	78	134	1,720	4,180	6,174
Dangdang	72.5	137.6	93.7	101.5	56.4	462
	2004	**2005**	**2006**	**2007**	**2008**	**Total**
Amazon (RMB mlns, at 2004-8 FX rate)	737	1,671	1,722	1,704	2,314	8,148

Source: Company data, J Capital

Note: for Amazon, we use the years 2004-8 as a better comparison with the other, more recently founded players, in order to show comparable periods of development.

Table 11. Capex as % of Revenue

	2011	2012	2013	2014	2015
JD	2.9%	2.8%	1.9%	2.5%	2.9%
VIPS	4.2%	1.8%	1.3%	7.4%	10.4%
Dangdang	2.0%	2.6%	1.5%	1.3%	0.6%
Amazon	1.3%	2.4%	2.0%	1.5%	1.7%

Source: Company data, J Capital

Table 12. AMZN shipping segment information (USD mlns)

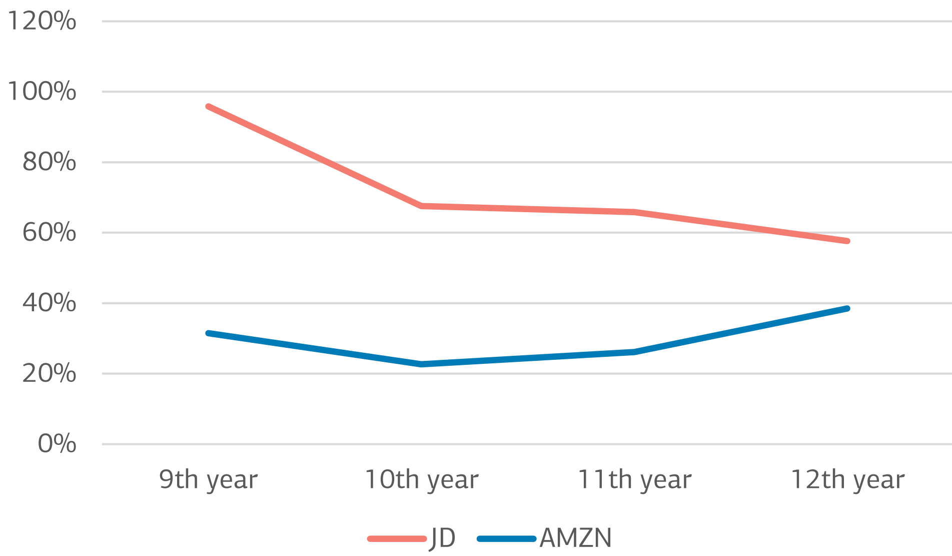
	2004	2005	2006	2007	2008
Shipping revenue	$420	$511	$567	$740	$835
Outbound shipping costs	(617)	(750)	(884)	(1,174)	(1,465)
Net shipping cost	($197)	($239)	($317)	($434)	($630)

Source: Company data, J Capital

Comparison with AMZN

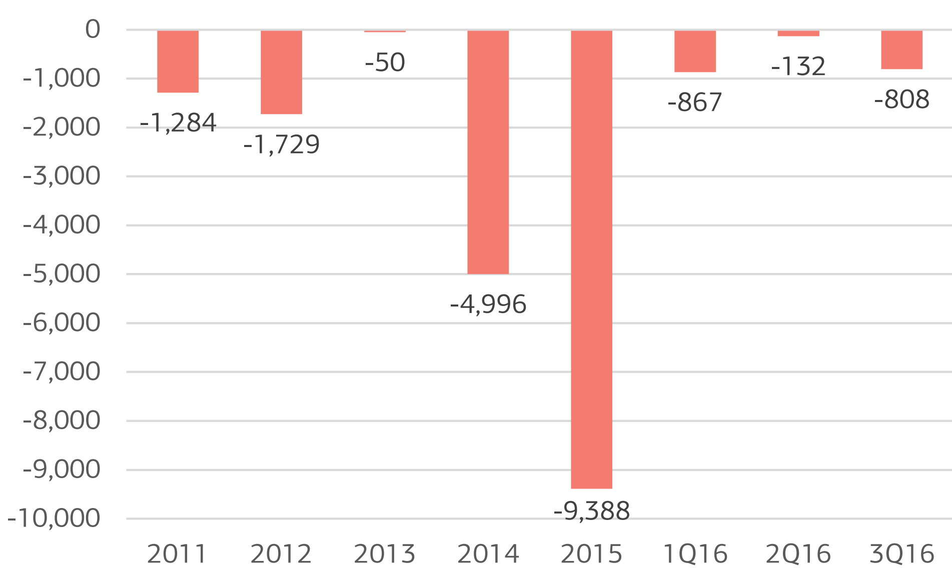
JD was founded in 1998 as an offline electronics retailer and started its e-commerce business 13 years ago, in 2003. Amazon, frequently seen as JD's role model, was founded in 1995. Amazon turned profitable in its ninth year; JD is still losing money.

Chart 1. Revenue Growth



Source: Company data

Chart 2. JD Losses (RMB mlns)



Source: Company data

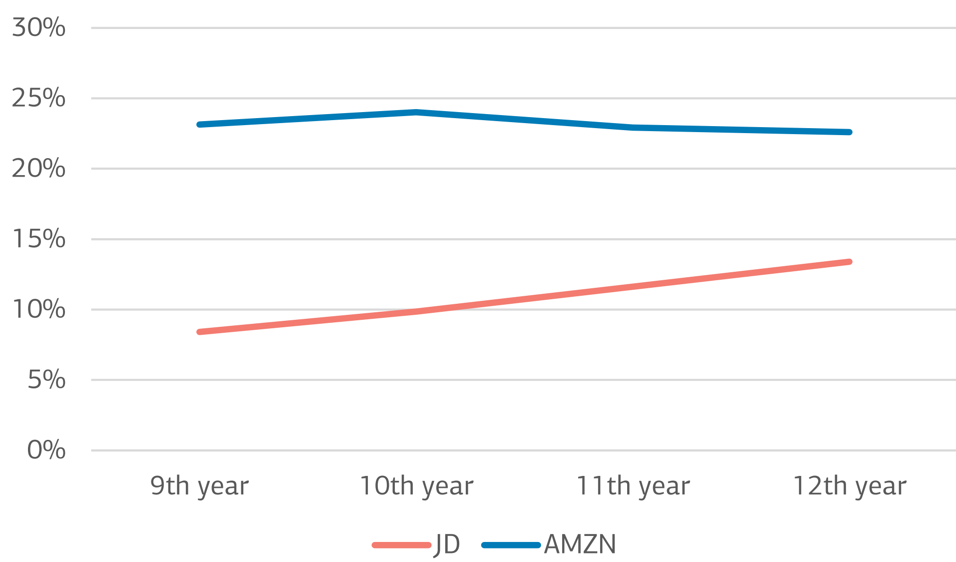
Amazon turned profitable in its ninth year; JD is still losing money.

For a fair comparison, we use AMZN data from 2005 to 2008, which is roughly equivalent to the 2012-2015 development period for JD, seeing as JD's e-commerce business was founded nearly eight years after Amazon's. Over the 2008-2012 period, JD's growth rate declined from 96% to 57.6%, while Amazon's grew from 31% in 2004 to 38% in 2007.

Profitability

Amazon has not grown as quickly as JD has, but it achieved much higher gross margins and turned profitable after eight years of losses. JD is still making losses after 13 years. JD's gross margin rose from 8.4% in 2012 to 13.4% in 2015, but that does not appear to be sustainable faced with the competition from Alibaba.

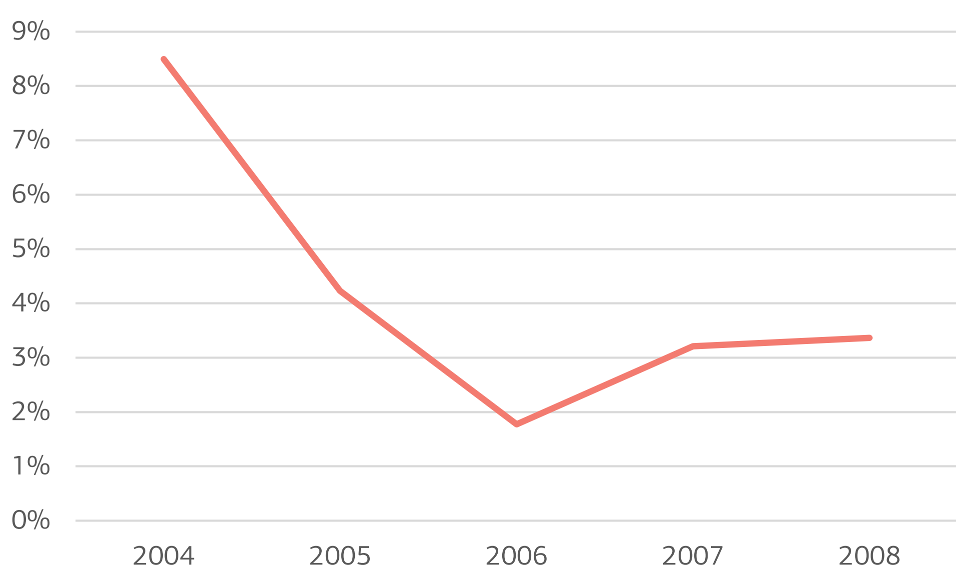
Chart 3. Gross Margin



Source: Company data

Note: the x axis indicates the year in business for each company.

Chart 4. Amazon Net Margin



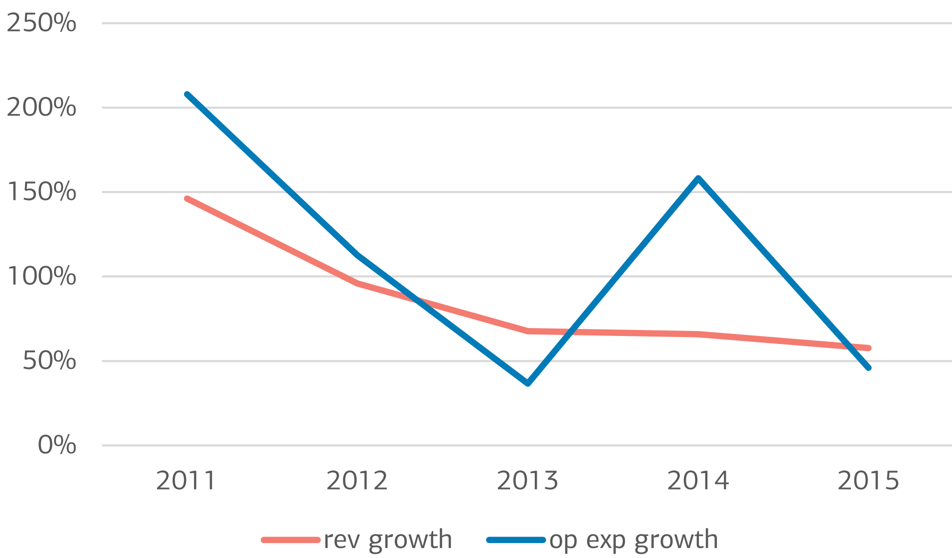
Source: Company data

JD has shown much higher growth than Amazon but has also spent more to get it.

Much lower efficiency

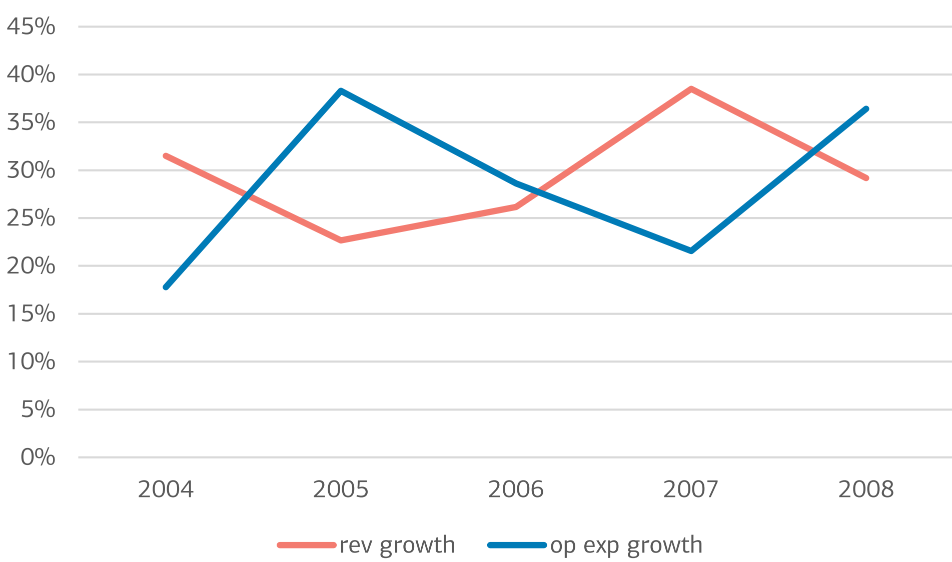
Valuations for JD and other Chinese e-commerce companies tend to rely on their growth. Consequently, JD has shown much higher growth than Amazon but has also spent more to get it. For example, in 2014, when JD's revenue growth was 66%, total operating expenses grew at 158%, meaning that JD had to spend RMB 2.38 more for every RMB 1 in revenue compared with the year earlier. Amazon's operating expenses also grew faster

Chart 5. JD Opex vs Revenue Growth



Source: Company data

Chart 6. Amazon Opex vs Revenue Growth

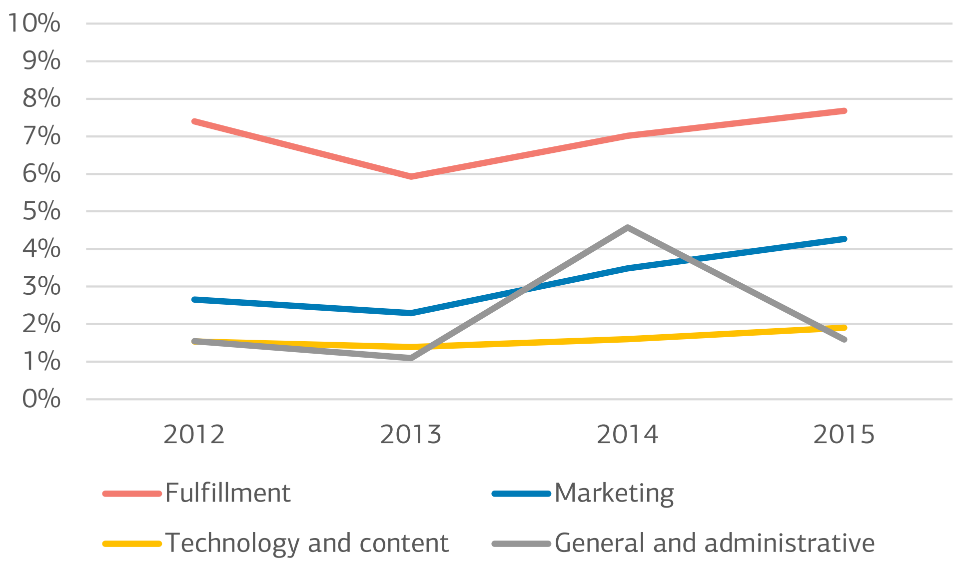


Source: Company data

than revenue but by a much lower margin—36% growth in opex versus 29% growth in revenue.

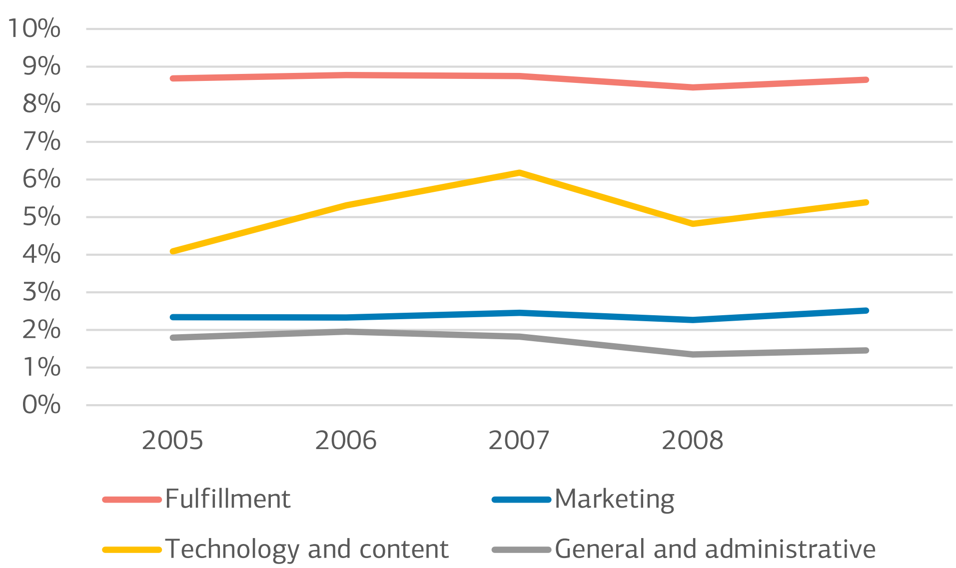
AMZN's marketing expenses remained stable at around 2.4% of revenue while JD's grew to 4.3% in 2015.

Chart 7. JD Expenses Breakdown



Source: Company data

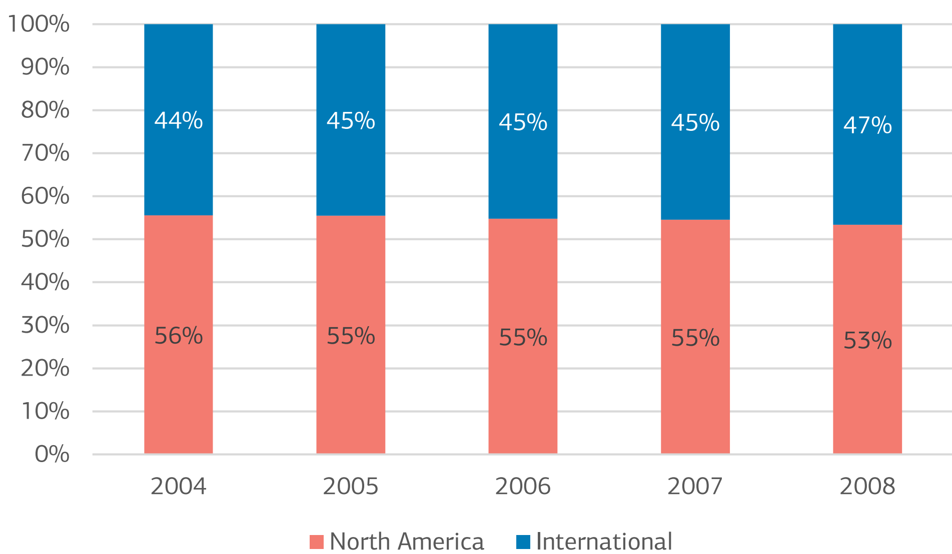
Chart 8. Amazon Expenses Breakdown



Source: Company data

One major difference between these two companies is their international strategy. Almost all of JD's revenue is from mainland China; its international expansion has produced weak results. In 2013, JD established an overseas department and started to explore the Russian market. The plan to acquire Russia's largest e-commerce platform, Ulmart, did not go through. In 2015, JD established a JV in Indonesia. Yet in Q1 2016, the head of JD's overseas department resigned, and no clear overseas expansion plan emerged.

Chart 9. Amazon Revenue Breakdown by Geographic Area



Source: Company data

Short of cash

We are always concerned when companies raise a lot of money. Just a year after JD's IPO, the company raised two more rounds of financing. In January 2016, JD raised RMB 6.65 bln for its internet finance business unit from investors including Sequoia China, Harvest Fund, and China Taiping Insurance Group. In April 2016, JD announced it would raise USD 1 bln in debt, of which USD 500 mln is due in 2021 and carries interest of 3.125%. The balance is due in 2026 and carries interest of 3.875%.

The cash need seems to be due to the losses in JD's main business and its finance and O2O businesses. In the financial year 2015, JD lost more than RMB 9.4 bln and continued to lose RMB 867 mln in the first quarter of 2016. Of the RMB 867 mln, over RMB 600 mln was from the finance and

O2O business. That meant that the company faced a lot of cash-flow pressure in Q1 last year. Its cash balance at the end of 2015 dropped by RMB 3.4 bln from one year earlier.

Credit reports provided by major ratings companies, Moody's and S&P, conflict with the perception of JD as an investable firm on a par with Alibaba.

Table 13. Credit Ratings of Major Internet Companies

	Moody's	S&P
JD	Baa3	BBB-
ALIBABA	A1	A+
BAIDU	A3	A
TENCENT	A2	A

Source: Bloomberg

At the same time, JD’s cash cycle has been extended. Inventory turnover days increased from 44 to 48 days from 2014 to 2015, as indicated in the table below, and receivables days more than doubled in 2015 compared with 2014. Even with payable days extended, the cash cycle lengthened. We believe this adds pressure to JD's cash flow.

Table 14. JD Cash Cycle is Extending (days)

	2011	2012	2013	2014	2015
Inventory turnover	50	46	37	44	48
Payable turnover	66	78	64	59	69
Receivable turnover	4	4	3	8	19

Source: Company data

Internet finance spinoff

JD announced that it was going to spin off its internet finance arm in the third quarter of 2016, restructuring it into a pure Chinese company with only Chinese shareholders. In this way, JD was preparing to win more financial services licenses that are not available to companies with foreign shareholders. According to the JD internet finance road show presentation, the company has obtained nine licenses and qualifications in finance including for factoring, small loans, and third-party payments. The company wanted to snag licenses for banking and insurance, available only to Chinese companies. During the restructuring process, JD's CEO Richard Liu acquired a minority share in the new company but remained the majority of voting rights.

Licenses may be nice, but we think a key reason for the restructuring was to pretty up the financials and achieve a further financing at a higher valuation. The spin-off gets rid of half of JD's losses.

We think a key reason for the restructuring was to pretty up the financials: the spin-off gets rid of half of JD's losses.

As per the road show PPT, the JD finance unit was responsible for more than half of the group losses over the past five quarters. Nevertheless, the finance company's net loss ratio declined. Its asset ratio (total assets divided by total liabilities) declined as well, from 1.53 in Q3 2014 to 1.07 in Q3 2015. Normally, the asset ratio should be greater than 1 to provide sufficient capital for a company's liabilities. By the end of Q3 2015, the internet finance business almost hit the red line, which is probably why it raised money at the beginning of 2016.

By spinning off the internet finance business, JD will improve its net margin. Half of its losses will be deconsolidated.

Table 15. JD Finance Financials (RMB mlns)

	Q3 2014	Q4 2014	Q1 2015	Q2 2015	Q3 2015
Revenue	150	248	282	435	541
Net loss	103	145	118	268	290
Net loss ratio	68.6%	58.5%	41.8%	61.6%	53.6%
Net loss of JD	164	454	710	510	535
FinTech contribution to JD losses	62.6%	31.9%	16.6%	52.5%	54.2%
Total assets	4,356	6,341	7,470	13,062	17,466
Total liabilities	2,844	4,666	5,906	11,671	16,365
Equity	1,512	1,675	1,563	1,391	1,101
Asset ratio	1.53	1.36	1.26	1.12	1.07

Source: J Capital, QQ

In January 2016, JD raised over RMB 6.6 bln at a valuation of RMB 46.6 bln. That implies a valuation of 30 times sales (12 months ended September 30 2015), much higher than JD's market valuation of a 1.4 times sales. Given that Richard Liu still holds majority voting rights in the finance business, we are concerned about independence in the use of proceeds.

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Still facing strong competition from Alibaba

Our interviews suggest that Alibaba's dominance is only growing. Merchants we have interviewed are willing to sell only about 5% of their product on the JD platform, since sales volumes are much lower.

We interviewed three brand owners that operate on both JD and TMall and five platforms that operate multiple stores on behalf of clients. Two of the three brands are large vendors of women's clothing and the third is in small kitchen appliances..

The brands would sell no more than 5% of their volume on JD. Although they are seeing good growth in volume, profit has declined compared with one year ago and consequently, their spending plan for the coming year is flat for both TMall and JD.

Interviews with the five agents indicated that the great majority of their merchants still prefer TMall and Taobao for their greater traffic and higher conversion rate. In the coming year, the more successful of the merchants planned to increase marketing budget by 5% to 20%. The agents vary in having between 5% and 20% of merchant clients who are experiencing negative growth in their business. Agents stated that retention rate of clients this year is lower than before.

Overall we believe that JD faces strong pushback from Alibaba and slower industry growth.

Valuation

We value JD at USD 23 based on P/S 0.87X with a 35% growth in the topline anticipated for 2016.

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